

AMENDMENTS TO THE SPECIFICATION:

Please amend the specification as follows:

At page 5, lines 21-27, and page 6, lines 1-4:

If, therefore, an overall access network system is formed by using the AAL5 layer (Fig. 20), since the PPP frame whose ATM cell has been subjected to frame header addition processing (PPP Encapsulation) is transmitted, SAR (Segmentation and Reassembly Sublayer) on the AAL5 layer must be performed first to terminate PPP. With this SAR processing, an original PPP frame is reassembled or processing for link establishment is performed by the CPU of the PPP termination apparatus 50l. After link establishment, the subscriber can transfer the IP packet to a backbone network 60l.

At page 10, lines 25-27, and page 11, lines 1-12:

An access network system 10 according to this embodiment is a system for performing PPP processing by using the MAC layer and roughly comprised of a subscriber apparatus (ATUU-R) 2nm, subscriber multiplexing/demultiplexing apparatus (DSLAM) 4n, and an access gateway (AG) 61, as shown in Fig. 1. A personal computer 1nm1 is connected to the subscriber apparatus 2nm of this system and designed as a whole such that Internet communication can be performed by connecting a backbone network 81 to the access gateway 61 through a POS OC-12C interface 71. POS of the POS OC-12C interface 71 is an abbreviation for packet over SDH/SONET (Synchronous Digital ~~Hierarchy~~ Hierarchy/Synchronous Optical Network), and OC-12 stands for a communication speed, which is 620 Mb/s.

At page 18, lines 22-27, and page 19, lines 1-10:

The POS OC-12C interface block 612 executes an interface function between the access gateway 61 and the backbone network 81. If the PPP packet in the Ethernet/IEEE 802.3 frame packet input to the packet switch module 611 is a PPP data packet, i.e., the discrimination result is the first discrimination, the PPP packet (Fig. 17A) is output through the POS OC-12C interface block 612. In this case, the PPP packet is subjected to PPP termination processing, and the PPP packet having undergone the PPP termination processing is converted into a PPP packet in PPP packet (Fig. 17B shows its frame). The PPP packet in PPP packet is electrooptically converted into a POS signal (POS OC-12c signal) in the SDH/SONET frame form shown in Fig. 18. This signal is then transmitted to the backbone network 81 through the POS OC-12C interface 71.

At page 20, line 27, and page 21, lines 1-2:

An example of how a MAC address is added in the Ethernet/IEEE 802.3 interface block 6nD will be described ~~describe~~ below with reference to Fig. 4.